

CLAIMS

We claim:

1. In a messaging board server using a legacy protocol to post data messages for multiple clients, a method of extending the functionality and data properties offered by the legacy protocol, without modifying the legacy protocol so as to maintain support for clients with only legacy capabilities, the method comprising the acts of:

receiving legacy data, including a main body of a data message, for posting on a messaging board over an unsecured legacy channel using a legacy protocol for supporting legacy clients;

participating in the creation of a secure side channel for exchanging extended data properties and supporting functionalities not offered by the legacy protocol;

receiving over the secure side channel extended data that includes a client hash value, created by a client when hashing at least a portion of the legacy data, and metadata for defining extended data properties that extend the legacy protocol;

creating a server hash value by hashing at least a portion of the legacy data received over the unsecured legacy channel;

linking the legacy data and the extended data; and

comparing the client hash value with the server hash value to ensure that the legacy data has not been altered for extending the functionality of the legacy protocol by securing the unsecured legacy channel without having modified the legacy protocol.

2. The method of claim 1, wherein the metadata within the extended data properties includes a type of message chosen from one of a question, comment, suggestion, answer, an answered question or an answered suggestion.

3. The method of claim 1, wherein the metadata within the extended data properties includes profiler data, which has details about a user who posted the legacy data including at least one of the user's integrity or how long the user has been posting messages to the message board server.

4. The method of claim 1, wherein at least a portion of the metadata within the extended data properties is periodically updated based on voting input from one or more users.

5. The method of claim 4, wherein the voting input from the one or more users is an opinion rating the message as one or more of useful, specifically the answer to an original question, or spam.

6. The method of claim 4, wherein the voting input from the one or more users is an opinion rating that is a scaled scoring.

7. The method of claim 4, wherein the voting input from the one or more users is a ranking of an author that posted the main body of the data message within the legacy data as an expert, guru, novice, apprentice, or company employee.

8. The method of claim 4, wherein the voting input for the one or more users is a scaled score ranking of an author that posted the main body of the data message within the legacy data.

9. The method of claim 4, wherein the one or more users are authenticated over the secure side channel.

10. The method of claim 9, wherein the authentication of the one or more users are based on one or more of an encryption, digital signing, basic HTTP, Windows NTLM, Kerberos, X509 certificate, Passport or MAC based authentication.

11. The method of claim 1, wherein the legacy protocol is network news transport protocol, and wherein the side channel protocol is hypertext transport protocol using secure socket layer protocol to secure the side channel.

12. The method of claim 11, wherein a format for the extended data received over the secure side channel is extensible markup language.

13. In a client that posts messages to a messaging board server using a legacy protocol, a method of extending the functionality and data properties offered by the legacy protocol without modifying the legacy protocol so as to maintain support for clients with only legacy capabilities, the method comprising the acts of:

posting legacy data, including a main body of a message, on a messaging board over an unsecured legacy channel using a legacy protocol that supports legacy clients;

establishing a secure side channel when exchanging extended data for supporting data properties and functionality not offered by the legacy protocol;

creating a client hash value by hashing at least a portion of the legacy data; and

sending over the secure side channel extended data that includes metadata for defining extended data properties and the client hash value to ensure that the legacy data over the unsecured legacy channel has not been altered.

14. The method of claim 13, wherein the metadata within the extended data properties includes a type of message chosen from one of a question, comment, suggestion, answer, an answered question or an answered suggestion.

15. The method of claim 13, wherein the metadata within the extended data properties includes profile data, which has details about a user of the client that posted the legacy data including at least one of the user's integrity or how long the user has been posting messages to the message board server.

16. The method of claim 13, wherein at least a portion of the metadata within the extended data properties includes voting input from a user of the client that posted the legacy data.

17. The method of claim 16, wherein the voting input from the user is an opinion rating the message as one or more of useful, not useful, useful but need more information, specifically the answer to an original question, or spam.

18. The method of claim 16, wherein the voting input from the user is an opinion rating that is a scaled scoring.

19. The method of claim 16, wherein the voting input for the one or more users is a scaled score ranking of a user that posted the main body of the data message within the legacy data.

20. The method of claim 16, wherein the user is authenticated over the secure side channel.

21. The method of claim 20, wherein the authentication of the user is based on one or more of an encryption, digital signing, basic HTTP, Windows NTLM, Kerberos, X509 certificate, Passport or MAC based authentication.

22. The method of claim 13, wherein the legacy protocol is network news transport protocol, and wherein the side channel protocol is hypertext transport protocol using secure socket layer protocol to secure the side channel.

23. The method of claim 22, wherein a format for the extended data sent over the secure side channel is extensible markup language.

24. In a client that receives messages from a network server using a legacy protocol, a method of extending the functionality and data properties offered by the legacy protocol without modifying the legacy protocol so as to maintain support for clients with only legacy capabilities, the method comprising the acts of:

receiving legacy data, including at least one main body of a message, from a network server to be received over an unsecured legacy channel using a legacy protocol that supports legacy clients;

establishing a secure side channel when exchanging extended data for supporting data properties and functionality not offered by the legacy protocol;

receiving over the secure side channel extended data that includes metadata for defining extended data properties and a server hash value, which is a hash of at least a portion of the legacy data received over the unsecured legacy channel;

linking the legacy data and the extended data;

creating a client hash value by hashing at least a portion of the legacy data received over the unsecured channel; and

comparing the client hash value with the server hash value to ensure that the legacy data has not been altered.

25. The method of claim 24, wherein the network server is a message board server, and the metadata within the extended data properties includes a type of message chosen from one of a question, comment, suggestion, answer, an answered question or an answered suggestion.

26. The method of claim 25, wherein the network server is a message board server, and the legacy data received over the unsecured legacy channel includes a conversation thread that has at least one root message that is a question and one or more other messages, and wherein the metadata includes a type of message for the other messages chosen from one of a question, comment, suggestion, answer, an answered question or an answered suggestion.

27. The method of claim 26, wherein the client visually collapses the conversation thread based on user-specified criteria and the extended data properties received for the root message and the other messages.

28. The method of claim 24, wherein the network server is a message board server and the metadata within the extended data properties includes profiler data, which has details about a user who posted the legacy data including at least one of the user's integrity or how long the user has been posting messages to the message board server.

29. The method of claim 24, wherein the network server is a message board server and the at least a portion of the metadata within the extended data properties is periodically updated based on voting input from one or more users, and wherein the client periodically makes a request for the extended data properties that have changed.

30. The method of claim 29, wherein the voting input from the one or more users is an opinion rating the message as one or more of useful, not useful, useful but need more information, specifically the answer to an original question, or spam.

31. The method of claim 29, wherein the opinion rating is a scaled scoring.

32. The method of claim 29, wherein the voting input from the one or more users is a ranking of an author that posted the main body of the data message within the legacy data as an expert, guru, novice, apprentice, or company employee.

33. The method of claim 24, wherein the network server is a message board server, the legacy protocol is network news transport protocol, and wherein the side channel protocol is hypertext transport protocol using secure socket layer protocol to secure the side channel.

34. The method of claim 33, wherein a format for the extended data received over the secure side channel is extensible markup language.

35. In a messaging board system for posting messages for multiple clients, a method of visually collapsing messages within a message thread based upon user-specified criteria for improving the user experience and efficiency of downloading messages, the method comprising:

receiving an initial message from a client for posting on a message board server, the initial message having extended attributes that include a message type, visual representation data, and data identifying the type of person posting the initial message;

receiving one or more subsequent messages from one or more clients for posting on a message board server, the one or more subsequent messages having extended attributes that include a message type, visual representation data, and data identifying the type of person posting the one or more messages;

correlating the initial message with the one or more subsequent messages for creating a message thread, which is a list of the visual representation data for the initial message and the one or more subsequent messages;

receiving user-specified message criteria important to a user for determining if the message thread can be collapsed; and

based on the user-specified message criteria, evaluating one or more of the extended attributes in the one or more subsequent messages against one or more of the extended attributes in the initial message for determining if the message thread can be collapsed into a minimized visual representation of the message tree.

36. The method of claim 35, wherein the minimized visual representation does not display any information about the thread.

37. The method of claim 35, wherein the message type for the initial message and the one or more subsequent messages is chosen from one of a question, comment, suggestion, answer, an answered question or an answered suggestion.

38. The method of claim 37, wherein the extended attributes for the initial message and the one or more subsequent messages further includes profiler data, which has details about a user who posted the message including at least one of the user's integrity or how long the user has been posting messages to the message board server.

39. The method of claim 37, wherein the extended attributes for the initial message and the one or more subsequent messages further includes extended data properties that are periodically updated based on voting input from one or more users, and wherein a client periodically makes a request for the extended data properties that have changed.

40. The method of claim 39, wherein the voting input from the one or more users is an opinion rating the message as one or more of useful, not useful, useful but need more information, specifically the answer to an original question, or spam.